

## Message Text

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ACTION OES-07

INFO OCT-01 EUR-12 ISO-00 ACDA-10 CIAE-00 INR-07 IO-14  
L-03 NSAE-00 NSC-05 EB-08 NRC-07 FEAE-00 DODE-00  
SS-15 SP-02 /091 W  
-----041395 041839Z /43

P 041704Z OCT 77  
FM AMEMBASSY VIENNA  
TO SECSTATE WASHDC PRIORITY 3591  
INFO USERDA HQ WASHDC PRIORITY  
USERDA HQ GERMANTOWN PRIORITY  
BROOKHAVEN NATIONAL LABORATORY UPTON NEW YROK PRIORITY

UNCLAS VIENNA 8915

USIAEA

DEPT PASS IO/SCT AND USNRC

BNL FOR H. KOUTS, ISOP

E.O. 11652: N/A  
TAGSC IAEA, PARM, TECH  
SUBJECT: FIELD TEST OF IAEA SAFEGUARDS TRACK-ETCH MONITORS

REF: LETTER 9/22/77 ROMETSCH TO STONE

1. MISSION HAS RECEIVED LETTER FROM IAEA DEPUTY DIRECTOR  
GENERAL ROMETSCH, TEXT AS FOLLOWS:

QUOTE

I AM WRITING TO YOUR ABOUT THE SAFEGUARDS TECHNIQUE BASED  
ON TRACK-ETCH NEUTRON FLUX MONITORS AND THE AUTOMATIC TAPE  
READ-OUT MACHINE WHICH THE AGENCY RECENTLY RECEIVED AS A US  
GIFT-IN-KIND UNDER TASK A.15.

THE TECHNIQUE LOOKS PROMISING FOR SAFEGUARDS APPLICATION  
BUT SINCE WE ARE EMBARKING ON PROCESSING AND EVALUATION OF THE  
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EXPOSED TAPES OURSELVES IN OUR SEIBERSDORF LABORATORIES, WE  
NEED A FEW MORE TAPES EXPOSED UNDER WELL-DEFINED CONDITIONS SO  
THAT WE CAN ESTABLISH PROCEDURES FOR PROCESSING AND EVALUATING  
THE TAPES ON OUR OWN. IN THE PAST, TESTS WITH THESE MONITORS  
WERE SOMETIMES NOT COMPLETELY SUCCESSFUL FOR WANT OF RELIABLE  
AND ADEQUATE SUPPORTING DATA.

IT IS NOW OUR PLAN TO CARRY OUT ABOUT HALF A DOZEN EX-  
POSURES OF THE TRACK-ETCH MONITOR IN POWER REACTORS UNDER  
VERY WELL DEFINED EXPERIMENTAL CONDITIONS WHERE EVERY STEP,  
STARTING FROM THE INSTALLATION AND CALIBRATION OF THE MONITOR,  
COLLECTION OF RELEVANT DATA, UNTIL RETRIEVAL OF THE DEVICE AND  
FINAL ETCHING AND READ-OUT OF THE TAPE, ARE ALL DONE UNDER THE  
RESPONSIBILITY OF THE AGENCY PROJECT OFFICER FOR DEVELOPMENT  
OF THIS TECHNIQUE.

WE ATTACH A DEGREE OF URGENCY TO COMPLETING THESE TESTS  
AT THE EARLIEST POSSIBLE DATE. WE BELIEVE DATA CAN BE QUICKLY  
ACCUMULATED IN THE US. WE WOULD HOPE THIS CAN BE ACCOMPLISHED  
UNDER THE US PROGRAMME FOR TECHNICAL ASSISTANCE TO IAEA SAFE-  
GUARDS.

IN THIS REGARD WE WOULD LIKE TO ASK YOU TO KINDLY TAKE  
THE NECESSARY STEPS SO THAT THE AGENCY CAN INSTALL A FEW OF  
ITS TRACK-ETCH REACTOR POWER MONITORS AT TYPICAL US NUCLEAR  
POWER REACTORS FOR SAFEGUARDS DEVELOPMENT PURPOSES EXPLAINED  
ABOVE. WE ENVISAGE THAT THE POWER STATION(S) WOULD CO-OP-  
ERATE BY SELECTING A SUITABLE SITE FOR PLACING THE MONITOR AND  
HELP IN ITS INSTALLATION AND RETRIEVAL AFTER A FEW MONTHS, AT  
TIMES CONVENIENT TO THE STATION. IT IS FURTHER ENVISAGED  
THAT AN AGENCY STAFF WOULD BE PRESENT ON THE DAYS OF INSTALLATION  
AND RETRIEVAL OF THE MONITOR IN ORDER TO CARRY OUT THE CALI-  
BRATION OF THE MONITOR AND TO COLLECT RELEVANT DATA FOR THE  
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EXPERIMENT.

WE LOOK FORWARD TO RECEIVING AN ENCOURAGING REPLY FROM  
YOU AFTER WHICH THE DETAILED ARRANGEMENTS REGARDING DATES OF  
INSTALLATION AND RETRIEVAL OF THE MONITORS AT US REACTORS  
SUGGESTED BY YOU AND REGARDING REACTOR OPERATING AND SUPPORT-  
ING DATA TO BE COLLECTED FOR THE EXPERIMENTS, COULD PERHAPS  
BE WORKED OUT WITHOUT MUCH DELAY. END QUOTE.

2. WALIGURA (IAEA) ADVISES THAT TESTS REFERRED TO ABOVE  
COULD BE PERFORMED AS AN ISPO TASK WITH A U.S.  
LABORATORY OR OTHER CONTRACTOR ASSISTING AGENCY'S PROJECT  
OFFICER, BY MAKING ARRANGEMENTS WITH REACTOR OPERATORS  
TO USE SUCH FACILITIES FOR FIELD TESTS. U.S. EXPERTS  
WOULD ASSIST IN EXPERIMENTAL DESIGN OF TESTS, COLLECTION  
OF OPERATORS' DATA, AND EVALUATION OF RESULTS OF TESTS.

3. TO ASSIST MISSION IN DRAFTING A REPLY, GENERAL  
VIEWS OF RESPONSIBLE U.S. AGENCIES RE IAEA PROPOSAL,  
AS ELABORATED IN PRECEDING PARA, WOULD BE APPRECIATED.

4. SUGGEST DETAILS OF PROPOSAL BE DISCUSSED WITH IAEA

AT TECHNICAL REVIEW MEETING, OCTOBER 10-14, IF  
WASHINGTON AGENCIES ARE INTERESTED. STONE

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## Message Attributes

**Automatic Decaptioning:** X  
**Capture Date:** 01-Jan-1994 12:00:00 am  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** MONITORING, TEXT, NUCLEAR SAFEGUARDS, TRACKING STATIONS, NUCLEAR WEAPONS  
**Control Number:** n/a  
**Copy:** SINGLE  
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**Decaption Date:** 01-Jan-1960 12:00:00 am  
**Decaption Note:**  
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**Disposition Approved on Date:**  
**Disposition Case Number:** n/a  
**Disposition Comment:**  
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**Enclosure:** n/a  
**Executive Order:** N/A  
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**Message ID:** 96f96e37-c288-dd11-92da-001cc4696bcc  
**Office:** ACTION OES  
**Original Classification:** UNCLASSIFIED  
**Original Handling Restrictions:** n/a  
**Original Previous Classification:** n/a  
**Original Previous Handling Restrictions:** n/a  
**Page Count:** 3  
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**Status:** NATIVE  
**Subject:** FIELD TEST OF IAEA SAFEGUARDS TRACK-ETCH MONITORS  
**TAGS:** TECH, PARM, IAEA  
**To:** STATE  
**Type:** TE  
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**Review Markings:**  
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